APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,806	05/25/2006	David Jay Duffield	PU030224	8853

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/580,806	DUFFIELD, DAVID JAY
	Examiner	Art Unit
	PINKAL CHOKSHI	2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 May 2009</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,4-8 and 10-13</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1,2,4-8 and 10-13</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>05/26/2009</u>.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

04/09/2009 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to claim 1 have been considered but are moot

in view of the new ground(s) of rejection. See the new rejection below.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1, 2, 4-8, and 10-13** are rejected under 35 U.S.C. 103(a) as being

unpatentable over US PG Pub 2002/0044658 to Wasilewski et al (hereafter referenced

as Wasilewski) in view of US Patent 6,697,489 to Candelore et al (hereafter referenced

as Candelore) and US Patent 5,592,551 to Lett et al (hereafter referenced as Lett).

Regarding **claim 1**, "an access device" reads on the set-top box that receives multiple programs from head-end (abstract) disclosed by Wasilewski and represented in Fig. 1 (element 113).

As to "device comprising: means for communicating an impulse purchase selection to a service provider using an out of band frequency which is different than content providing frequencies" Wasilewski discloses (¶0048 and ¶0099) that the subscriber purchases impulse pay-per-view (IPPV) program from service distribution organization as represented in Fig. 1 (element 103). Wasilewski further discloses (¶0097-¶0100) that the STB uses secure transmission of the reverse path to communicate messages with the head-end which is different than the path to provide contents to STB as represented in Fig. 4.

As to "means for receiving an authorization key transmitted by the service provider in response to the impulse purchase selection" Wasilewski discloses (¶0048) that the service provider sends authorization information for the IPPV program to set top box.

As to "means for receiving a program associated with the impulse purchase selection" Wasilewski discloses (¶0048) that the program data for IPPV program is sent to set-top box.

As to "means for processing the received program using the authorization key" Wasilewski discloses (¶0099) that the decryption by the set top box is authorized by the entitlement manager upon reception of EMM from head-end,

where EMM, which includes authorization information, is in response to a request

from set top box as represented in Fig. 4.

Wasilewski meets all the limitations of the claim except "communicating to

a service provider using an out of band frequency." However, Candelore

discloses (col.8, lines 37-48) that the set top unit uses out-of-band frequency

transmitter, which is different than the content received, to deliver request to

head-end for IPPV program as represented in Fig. 8 (element 721). Therefore, it

would have been obvious to one of the ordinary skills in the art at the time of the

invention to modify Wasilewski's system by using out-of-band frequency to

communicate between STB and head-end as taught by Candelore in order to

separate two different kinds of data from the stream.

As to "means for generating a billing record in response to the receipt of

the authorization key, wherein the access device transmits the billing record to

the service provider" Wasilewski discloses (¶0344) that the DHCT database

includes customer billing information. However, combination of Wailewski and

Candelore does not explicitly teach that the access device generates a billing

record after receiving authorization key and transmits the billing record to the

service provider. Lett discloses (col.4, line 41-col.5, line 4) that the authorization

data for program is transmitted from control center to subscriber terminal via

head-end and subscriber terminal transmits billing data over a telephone line to

control center as represented in Fig. 2 (elements 14, 10, 30). Therefore, it would

have been obvious to one of the ordinary skills in the art at the time of the

invention to modify Wasilewski and Candelore's systems by generating and

providing billing data to the service provider as taught by Lett so the customers

can be billed for their program services (col.5, lines 3-4).

Regarding **claim 2**, "an access device comprising: means for indicating a

desired impulse purchase selection using an out of band frequency which is

different than content providing frequencies" Wasilewski discloses (¶0048 and

¶0099) that the subscriber purchases impulse pay-per-view (IPPV) program from

service distribution organization as represented in Fig. 1 (element 103).

Wasilewski further discloses (¶0097-¶0100) that the STB uses secure

transmission of the reverse path to communicate messages with the head-end

which is different than the path to provide contents to STB as represented in Fig.

4.

As to "means for communicating the desired impulse purchase selection

to a service provider" Wasilewski discloses (¶0048 and ¶0099) that the

subscriber purchases impulse pay-per-view (IPPV) program from service

distribution organization as represented in Fig. 1 (element 103).

As to "means for receiving an authorization key transmitted to the access

device, and specific to, the desired impulse purchase selection" Wasilewski

discloses (¶0048) that the service provider sends authorization information for

the IPPV program to set top box.

As to "means for receiving the transmission of a desired program associated with the impulse purchase selection" Wasilewski discloses (¶0048) that the program data for IPPV program is sent to set-top box.

As to "means for processing the received program using the authorization key" Wasilewski discloses (¶0099) that the decryption by the set top box is authorized by the entitlement manager upon reception of EMM from head-end, where EMM, which includes authorization information, is in response to a request from set top box as represented in Fig. 4.

Wasilewski meets all the limitations of the claim except "communicating to a service provider using an out of band frequency." However, Candelore discloses (col.8, lines 37-48) that the set top unit uses out-of-band frequency transmitter, which is different than the content received, to deliver request to head-end for IPPV program as represented in Fig. 8 (element 721). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Wasilewski's system by using out-of-band frequency to communicate between STB and head-end as taught by Candelore in order to separate two different kinds of data from the stream.

As to "means for generating a billing record in response to the receipt of the authorization key, wherein the access device transmits the billing record to the service provider" Wasilewski discloses (¶0344) that the DHCT database includes customer billing information. However, combination of Wailewski and Candelore does not explicitly teach that the access device generates a billing

record after receiving authorization key and transmits the billing record to the

service provider. Lett discloses (col.4, line 41-col.5, line 4) that the authorization

data for program is transmitted from control center to subscriber terminal via

head-end and subscriber terminal transmits billing data over a telephone line to

control center as represented in Fig. 2 (elements 14, 10, 30). Therefore, it would

have been obvious to one of the ordinary skills in the art at the time of the

invention to modify Wasilewski and Candelore's systems by generating and

providing billing data to the service provider as taught by Lett so the customers

can be billed for their program services (col.5, lines 3-4).

Regarding **claim 4,** "the access device wherein the means for receiving

the authorization key receives the authorization key via an out of band frequency"

Wasilewski discloses (¶0048) that the reception of EMM that include

authorization information, uses out-of-band RF link to transmit the data from

head-end to receiver.

Regarding **claim 5,** "the access device wherein the means for

communicating the desired impulse purchase utilizes a two way communications

interface" Wasilewski discloses (¶0099) that the entitlement agent responds to

user's input to purchase IPPV event and based on this request, it transmits event

to receiver. This requires a two way communication's interface.

Regarding **claim 6,** "the access device wherein the billing record

transmitted to the service provider is transmitted via the two way communications

interface" Lett discloses (col.4, lines 57-67) that the subscriber terminal transmits

the billing data back up the cable line, which received the content, to RF IPPV

processor at the head-end (Fig. 2 represents that subscriber terminal 14 using

two way communications interface to receive data from elements 44, 46, 48, 50,

52 and transmit data to element 34.) In addition, same motivation is used as

rejection to claim 2.

Regarding **claim 7,** "an access device comprising: a tuning and a

communications unit for transmitting an impulse purchase message using an out

of band frequency which is different than content providing frequency"

Wasilewski discloses (¶0048 and ¶0099) that the subscriber purchases impulse

pay-per-view (IPPV) program from service distribution organization as

represented in Fig. 1 (element 103). Wasilewski further discloses (¶0097-¶0100)

that the STB uses secure transmission of the reverse path to communicate

messages with the head-end which is different than the path to provide contents

to STB as represented in Fig. 4.

As to "receiving an authorization key transmitted in response to the

transmission of the impulse purchase message and associated with the impulse

purchase program" Wasilewski discloses (¶0048) that the STB receives

authorization information which includes a key for a program that user requested to view.

As to "a controller and decoder unit responsive to the authorization key that formats a digital program into a video display" Wasilewski discloses (¶0191 and ¶0192) that the microprocessor the STB is used for encryption, decryption, and authentication EMM code received from head-end to display video program onto display device as represented in Fig. 12 (element 1201). Wasilewski further discloses (¶0044 and ¶0062) that the decoder unit decodes the key stored in memory.

Wasilewski meets all the limitations of the claim except "communicating to a service provider using an out of band frequency." However, Candelore discloses (col.8, lines 37-48) that the set top unit uses out-of-band frequency transmitter, which is different than the content received frequency, to deliver request to head-end for IPPV program as represented in Fig. 8 (elements 721, 780). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Wasilewski's system by using out-of-band frequency to communicate between STB and head-end as taught by Candelore in order to separate two different kinds of data from the stream.

As to "a billing generator which generates a billing record in response to the receipt of the authorization key, wherein the access device transmits the billing record to the same location as the impulse purchase message" Wasilewski discloses (¶0344) that the DHCT database includes customer billing information.

However, combination of Wailewski and Candelore does not explicitly teach that
the access device generates a billing record after receiving authorization key and
transmits the billing record to the service provider. Lett discloses (col.4, line 41-
col.5, line 4) that the authorization data for program is transmitted from control
center to subscriber terminal via head-end and subscriber terminal transmits
billing data over a telephone line to the same control center that transmitted
programming data as represented in Fig. 2 (elements 14, 10, 30). Therefore, it
would have been obvious to one of the ordinary skills in the art at the time of the
invention to modify Wasilewski and Candelore's systems by generating and
providing billing data to the service provider as taught by Lett so the customers
can be billed for their program services (col.5, lines 3-4).

Regarding **claim 8,** "a method of providing a secure means for purchasing
an impulse purchase program" reads on the set-top box that receives multiple
programs from head-end (abstract) disclosed by Wasilewski and represented in
Fig. 1 (element 113). Wasilewski further discloses (¶0099) that the system
broadcasts beginning of IPPV event so a customer can decide whether he/she
wants to watch all of it.

As to "method comprising the steps of: communicating a message using
an out of band frequency which is different than content providing frequency to a
service provider means that indicates an impulse purchase selection" Wasilewski
discloses (¶0048 and ¶0099) that the subscriber purchases impulse pay-per-view

(IPPV) program from service distribution organization as represented in Fig. 1 (element 103). Wasilewski further discloses (¶0097-¶0100) that the STB uses secure transmission of the reverse path to communicate messages with the head-end which is different than the path to provide contents to STB as represented in Fig. 4.

As to "receiving, at a receiver, authorization information transmitted in response to the communicated message, and specific to the impulse purchase program" Wasilewski discloses (¶0048) that the set-top box receives authorization information for the IPPV program transmitted from the service provider.

As to "receiving, at a receiver, the impulse purchase program" Wasilewski discloses (¶0048) that the program data for IPPV program is received at the set-top box.

As to "processing the impulse purchase program in response to the authorization information" Wasilewski discloses (¶0099) that the decryption by the set top box is authorized by the entitlement manager upon reception of EMM from head-end, where EMM, which includes authorization information, is in response to a request from set top box as represented in Fig. 4.

Wasilewski meets all the limitations of the claim except "communicating to a service provider using an out of band frequency." However, Candelore discloses (col.8, lines 37-48) that the set top unit uses out-of-band frequency transmitter, which is different than the content received, to deliver request to

head-end for IPPV program as represented in Fig. 8 (element 721). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Wasilewski's system by using out-of-band frequency to communicate between STB and head-end as taught by Candelore in order to separate two different kinds of data from the stream.

As to "generating a billing record at the receiver in response to the receipt of the authorization key and transmitting the billing record from the receiver to the service provider" Wasilewski discloses (¶0344) that the DHCT database includes customer billing information. However, combination of Wailewski and Candelore does not explicitly teach that the access device generates a billing record after receiving authorization key and transmits the billing record to the service provider. Lett discloses (col.4, line 41-col.5, line 4) that the authorization data for program is transmitted from control center to subscriber terminal via head-end and subscriber terminal transmits billing data over a telephone line to control center as represented in Fig. 2 (elements 14, 10, 30). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Wasilewski and Candelore's systems by generating and providing billing data to the service provider as taught by Lett so the customers can be billed for their program services (col.5, lines 3-4).

Regarding **claim 10,** "the method wherein the receiving step comprises receiving the authorization via an out of band frequency" Wasilewski discloses

(¶0048) that the reception of EMM that include authorization information, uses
out-of-band RF link to transmit the data from head-end to receiver.

Regarding **claim 11,** "the method wherein the communicating step
comprises communicating the message via a two way communications interface"
Wasilewski discloses (¶0099) that the entitlement agent responds to user's input
to purchase IPPV event and based on this request, it transmits event to receiver.
This requires a two way communication's interface.

Regarding **claim 12,** "the method wherein the billing record is transmitted
to the service provider via the two way communications interface" Lett discloses
(col.4, lines 57-67) that the subscriber terminal transmits the billing data back up
the cable line, which received the content, to RF IPPV processor at the head-end
(Fig. 2 represents that subscriber terminal 14 using two way communications
interface to receive data from elements 44, 46, 48, 50, 52 and transmit data to
element 34.) In addition, same motivation is used as rejection to claim 8.

Regarding **claim 13,** "a method of providing a secure means for
purchasing an impulse purchase program" reads on the set-top box that receives
multiple programs from head-end (abstract) disclosed by Wasilewski and
represented in Fig. 1 (element 113). Wasilewski further discloses (¶0099) that

the system broadcasts beginning of IPPV event so a customer can decide

whether he/she wants to watch all of it.

As to "method comprising the steps of: selecting the desired impulse

purchase program" Wasilewski discloses (¶0048 and ¶0099) that the subscriber

purchases impulse pay-per-view (IPPV) program from service distribution

organization as represented in Fig. 1 (element 103).

As to "communicating the desired impulse purchase program selection to

a service provider using an out of band frequency which is different than content

providing frequency" Wasilewski discloses (¶0048 and ¶0099) that the subscriber

purchases impulse pay-per-view (IPPV) program from service distribution

organization as represented in Fig. 1 (element 103). Wasilewski further

discloses (¶0097-¶0100) that the STB uses secure transmission of the reverse

path to communicate messages with the head-end which is different than the

path to provide contents to STB as represented in Fig. 4.

As to "responding to the communicated impulse purchase program

selection by transmitting an authorization code to the access device uniquely

associated with the desired impulse purchase program" Wasilewski discloses

(¶0048) that the service provider sends authorization information for the IPPV

program to set top box.

As to "storing the authorization code associated with the desired impulse

purchase program into a security module in the access device" Wasilewski

discloses (¶0094) that the EMM manager stores authorization information in the allocated space in STB.

As to "transmitting to the access device an impulse purchase program having an entitlement code associated with authorization code stored in the security module" Wasilewski discloses (¶0094) that the entitlement agent at head-end transmits EMM with authorization information to STB where it gets stored in the memory device as represented in Fig. 4 (elements 405, 407).

As to "decoding the entitlement code" Wasilewski discloses (¶0044 and ¶0062) that the decoder unit decodes the EMM and authorization key stored in memory.

As to "comparing the entitlement code to the code stored in the security module to permit viewing of the impulse purchase program" Wasilewski discloses (¶0075) that the ECM received in STB is compared with the value resulting from hashing the content stored in memory to determine whether STB is authorized to receive the service program as represented in Fig. 3 (elements 323, 343).

Wasilewski meets all the limitations of the claim except "communicating to a service provider using an out of band frequency." However, Candelore discloses (col.8, lines 37-48) that the set top unit uses out-of-band frequency transmitter, which is different than the content received, to deliver request to head-end for IPPV program as represented in Fig. 8 (element 721). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Wasilewski's system by using out-of-band frequency to

communicate between STB and head-end as taught by Candelore in order to
separate two different kinds of data from the stream.

As to "generating a billing record at the access device in response to the
receipt of the authorization key and transmitting the billing record from the access
device to the service provider" Wasilewski discloses (¶0344) that the DHCT
database includes customer billing information. However, combination of
Wailewski and Candelore does not explicitly teach that the access device
generates a billing record after receiving authorization key and transmits the
billing record to the service provider. Lett discloses (col.4, line 41-col.5, line 4)
that the authorization data for program is transmitted from control center to
subscriber terminal via head-end and subscriber terminal transmits billing data
over a telephone line to control center as represented in Fig. 2 (elements 14, 10,
30). Therefore, it would have been obvious to one of the ordinary skills in the art
at the time of the invention to modify Wasilewski and Candelore's systems by
generating and providing billing data to the service provider as taught by Lett so
the customers can be billed for their program services (col.5, lines 3-4).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure.

- US PG Pub 2003/0046683 to Jutzi discloses billing information generated and
  transmitted from the STB to the server.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pinkal Chokshi/
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425